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EXAMINER

RODRIGUEZ, GLENDA P

ART UNIT PAPER NUMBER

2651

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,089

Applicant(s)

EGAN, CURTIS W.

Examiner

Glenda P. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/31/04, 4/1/05 and 9/22/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 38 is rejected under 35 U.S.C. 102(e) as being anticipated by Ottesen et al. (US Patent No. 6, 288, 856).

Regarding Claim 38, Ottesen et al. teaches a hard disk drive comprising of:

A base (Fig. 1, Element 20);

A disk comprising a plurality of data tracks arranged concentrically about a spindle (Fig. 1, Elements 24, 50 and 52);

A transducer head for reading and writing information to said data tracks, wherein said transducer head is moveable in a radial direction with respect to said disk to address a selected one of said plurality of data tracks (Fig. 1, Element 27);

A voice coil motor, interconnected to said transducer head, for moving said transducer head with respect to said data tracks (Fig. 1, Element 39);

A controller, interconnected to said voice coil motor, for controlling a position of said transducer head with respect to said data tracks (Fig. 1, Element 58);

And a channel, interconnected to said transducer head, wherein a signal derived from information encoded in n bit cells in a one of said data tracks is read by said

transducer head and is transmitted to said channel, wherein in a flaw detection mode said information encoded in said data tracks is encoded in a known pattern, wherein in said flaw detection mode said signal is sampled at least m times, wherein m samples are used to derive a first value, each of said m samples having an amplitude greater than 50% of the amplitude of an isolated pulse, wherein said m samples are significant samples, and wherein said first value is compared to a threshold value (Col. 11, L. 43-54, wherein it illustrates the receiving of the continuous signal $x(t)$ in Fig. 7 and Col. 12, L. 19-40, wherein it illustrates the sampling of $x(t)$ to $x[n]$, wherein the PW50 or greater than 50% amplitudes pulses, are taken to derive an average d and is compared to a spacing data reference or threshold.).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5, 7, 16-19, 21, 22, 26 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. (US Patent No. 6, 288, 856) in view of Monett (US Patent No. 4, 929, 894).

Claims (1 and 21) have limitations similar to those treated in the above rejection of Claim 38, and are met by the references as discussed above. Claims (1 and 21) however also recite the following limitations... "Using the step to whether there is a flaw in at least a portion of the disk.

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However, Ottesen et al. does not explicitly teach this limitation. Monett teaches wherein pulses are sampled and read by the read head wherein if in a certain window, the appropriate number of pulses are not read, a flaw or defect is detected in the disk (See Col. 4, L. 20-43 and Summary of the Invention).” It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ottesen et al.’s invention with the teaching of Monett in order to detect flaws in the disk by the examination of the track data.

Regarding Claims 2, 22 and 37, the combination of Ottesen et al. and Monett teach all the limitations of Claims 1 and 21, respectively. The combination further teaches on Fig. 4, Element 66, emitting a signal to record the exact locations wherein the threshold was deemed unacceptable.

Regarding Claim 5, the combination of Ottesen et al. and Monett teaches all the limitations of Claim 1. The combination further teach wherein the samples are taken at times corresponding to expected peak values (See Col. 12, L. 19-40 of Ottesen et al.).

Regarding Claim 19, the combination of Ottesen et al. and Monett teaches all the limitations of Claim 1. The combination further teach wherein n is greater than 1 (See Col. 4, L. 20-43 and Summary of the Invention, where Monett utilizes timing windows wherein a plurality of peaks are measured).

Regarding Claims 7 and 26, Ottesen et al. and Monett teach all the limitation of Claims 1 and 21. The combination further teach averaging the values as taught by Ottesen et al. in Col. 12, L. 19-40.

Regarding Claim 16, Ottesen et al. and Monett teach all the limitations of Claim 1. However, Ottesen et al. and Monett does not explicitly teach wherein m is equal to n . It would

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have been obvious to a person of ordinary skill in the art to make n equal to m if during the sampling period, the number of n samples would have been the same number as m because depends on n . It would have been obvious to a person of ordinary skill in the art, to make m equal to n in order to verify if the data the medium has any flaws as taught by Monett in the Summary of the Invention.

Regarding Claim 18, the combination of Ottesen et al. and Monett teach the limitations of Claim 1. The combination teach all the limitations of Claim 1. However, the combination does not explicitly teach wherein to teach that m is equal to n . It would have been obvious to a person of ordinary skill in the art to make n equal to m if during the sampling period, the number of n samples would have been greater than the number as m because depends on n . It would have been obvious to a person of ordinary skill in the art, to make m equal to n in order to verify if the data the medium has any flaws as taught by Monett in the Summary of the Invention.

Regarding Claim 17, the combination of Ottesen et al. and Monett teach all the limitations of Claim 2. The combination further teaches that the unacceptable signal is passed to the controller (Col.6, L. 41-53 of Ottesen et al.).

5. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. in view of Lim (US Patent No. 6, 100, 683). Regarding Claim 39, Ottesen et al. teach all the limitations of Claim 38. Ottesen et al. also teaches that the unacceptable signal is passed to the controller (Col.6, L. 41-53). However, Ottesen et al. does not explicitly teach wherein the value is less than threshold value. Lim et al. teaches this in Fig. 3, Element 214 and END, wherein Lim et al. depicts that when the value is less than the threshold it signals the operation to end. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to

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modify Ottesen et al.'s invention with the teaching of Lim et al. in order to notify if the value was less in order to know if the medium has sufficient errors to be deemed critical.

6. Claims 3, 4, 23, 24 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. and Monett as applied to claims 1 and 21 above, and further in view of Lim (US Patent No. 6, 100, 683).

Regarding Claim 3 and 23, the combination of Ottesen et al. and Monett teach all the limitations of Claims 1 and 21. However, the combination does not teach wherein generating a signal if said value from said m samples is less than said threshold value is less than said threshold value. Lim et al. teaches this in Fig. 3, Element 214 and END, wherein Lim et al. depicts that when the value is less than the threshold it signals the operation to end. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Lim et al. in order to notify if the value was less in order to know if the medium has sufficient errors to be deemed critical.

Regarding Claim 4 and 24, the combination of Ottesen et al. and Monett teach all the limitations of Claim 1 and 21. However, the combination does not explicitly teach generating a signal if said value derived from said m samples is not greater than said threshold value. Lim et al. teaches this in Fig. 3, Element 214 and END, where Lim et al. depicts that when the value is not greater than the threshold it signals the operation to end. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Lim et al. in order to notify if the value was less in order to know if the medium has sufficient errors to be deemed critical.

Regarding Claim 35, the combination of Ottesen et al. and Monett teach all the limitations of Claim 21. However, the combination does not explicitly teach wherein step of reading first, second, third and fourth bit cells and deriving the samples from those first, second third and fourth signals. Lim et al. teach a method that samples a number of bit cells and derives a number from those samples taken from bit cells. It would have been obvious to a person of ordinary skill in the art to know that in order to derive a value, multiple samples need to be used (Col. 1, Lines 54-58 and Col. 3, Lines 10-16. Lim et al. uses multiple samples from magnetic transitions in the disk to calculate a value that is compared to a threshold, Col. 1, Lines 54-58 and Col. 3, Lines 10-16.). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Lim et al. in order to have a plurality of samples in order to calculate a value to be compared to a threshold (Pat. No. 6, 100, 683; Abstract).

7. Claims 6, 8, 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. and Monett as applied to claims 1 and 21 above, and further in view of Sloan et al. (US Patent No. 6, 252, 731).

Regarding Claim 6 and 25, the combination of Ottesen et al. and Monett teach all the limitations of Claim 1 and 21. However, the combination does not explicitly teach wherein said m samples has a magnitude, and wherein said step of deriving a value from m of said n samples comprises calculating a sum comprising said magnitude of each of said m samples. Sloan et al. teaches that takes encoded digital data and generates a byte, which represents the sum of the data that was read from the disk (See Col. 6, Lines 9-24). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's

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invention with the teaching of Sloan et al. to generate an integral from the sampled data in order to generate an optimum value for a selected parameter affecting the disc as taught in the Abstract of Sloan et al.

Regarding Claim 8 and 32, the combination of Ottesen et al. and Monett teach all the limitations of Claim 1 and 21. However, the combination does not explicitly teach wherein said m samples has a magnitude, and wherein said step of deriving a value from m of said n samples comprises calculating an integral comprising said magnitude of each of said m samples. Sloan et al. teaches that it takes the encoded digital data and generates a byte which represents the integral of the data that was read from the disk (Pat. No. 6, 252, 731; Col. 6, Lines 9-24). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Sloan et al. to generate an integral from the sampled data in order to generate an optimum value for a selected parameter affecting the disc as taught in the Abstract of Sloan et al.

8. Claims 9 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. and Monett as applied to claims 1 and 21 above, and further in view of Livingston (US Patent No. 6, 513, 141). The combination of Ottesen et al. and Monett teach all the limitations of Claims 1 and 21, respectively. However, the combination does not explicitly teach calculating a difference between a value of a magnitude of each of the m samples and an optimal magnitude. Livingston teaches a medium that calculates a difference between an estimated (or optimal) value being subtracted with an actual signals that were derived to attain an error signal (Col. 13, Lines 20-28). It would have been obvious to a person of ordinary skill in the art, at the time the

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invention was made, to modify the combination's invention with the teaching of Livingston to calculate the difference in the signal in order to attain an signal in order to control the errors.

9. Claims 10, 12, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al., Monett and Livingston as applied to claims 9 and 27, respectively, above, and further in view of Sloan et al. (US Patent No. 6, 252, 731).

Regarding Claim 10 and 28, the combination of Ottesen et al., Monett and Livingston teach all the limitations of Claim 9 and 27, respectively. However, the combination does not explicitly teach wherein said m samples has a magnitude, and wherein said step of deriving a value from m of said n samples comprises calculating a sum comprising said magnitude of each of said differences. Sloan et al. teaches that takes encoded digital data and generates a byte which represents the sum of the data that was read from the disk (Pat. No. 6, 252, 731; Col. 6, Lines 9-24). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Sloan et al. in order to generate an integral from the sampled data in order to generate an optimum value for a selected parameter affecting the disc as taught by Sloan et al. in the Abstract.

Regarding Claim 12 and 30, the combination of Ottesen et al., Monett and Livingston teach all the limitations of Claim 9 and 27, respectively. However, the combination does not explicitly teach wherein said m samples has a magnitude, and wherein said step of deriving a value from m of said n samples comprises calculating an integral comprising said magnitude of each of said differences. Sloan et al. teaches that takes encoded digital data and generates a byte which represents the integral of the data that was read from the disk (Pat. No. 6, 252, 731; Col. 6, Lines 9-24).

Claims 11 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al., Monett and Livingston as applied to claims 9 and 27 above, and further in view of Lim et al. (US Patent No. 6, 606, 211). the combination of Ottesen et al., Monett and Livingston teach all the limitations of Claims 9 and 27, respectively. However, the combination does not explicitly teach obtaining an average value of said m samples. Lim et al. ('211), wherein it teaches that from the sampled values it then calculates an average as taught in Pat. 6, 606, 211 in Col. 4, L. 21-44. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Lim et al. ('211) in order to detect the average from the sampled values in order to detect the defects in a recordable medium (Pat. No. 6, 606, 211; Abstract).

9. Claims 13, 14, 31, 33, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. and Monett as applied to claim 1 and 21 above, and further in view of Zook (US Patent No. 5, 793, 548).

Regarding Claim 34, the combination of Ottesen et al. and Monett teach all the limitation of Claim 21. The combination does not explicitly teach magnetizing in at least one of two directions each bit cell included in a plurality of bit cells comprising magnetizing first and second bit cell in said first direction and magnetizing third and fourth bit cell in a second direction. Zook teaches that A 2T sampled sequence generates a sample sequence that contains by magnetizing first and second bit cell in said first direction and magnetizing third and fourth bit cell in a second direction in Col. 8, L. 47-53. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's

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invention in order to have a 2T sample sequence in order to detect flaws when processing the signal in the channel.

Regarding Claim 36, the combination of Ottesen et al. and Monett teach all the limitations of Claim 21. However, the combination does not explicitly teach wherein said step of magnetizing each bit cell included in a plurality of bit cells on said disk comprises creating an iT pattern of encoded signals. Zook teaches magnetizing each bit cell included in a plurality of bit cells on said disk comprises creating an 2T pattern of encoded signals (i meaning any integer) in Col. 8, Lines 43-53. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention in order to have a 2T sample sequence in order to detect flaws when processing the signal in the channel.

Regarding Claims 13 and 31, the combination of Ottesen et al. and Monett teach all the limitations of Claims 1 and 21, respectively. However, the combination does not explicitly teach wherein step of deriving a value from m comprises filtering said m samples. Zook teaches the use of a filter during the step of deriving a value from m (Pat. No. 5, 793, 548; Col. 6, Lines 16-21). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Zook in order to filter the signal in order for the derived value to be close to the desired response as taught by Zook in Col. 6, Lines 16-23.

Regarding Claim 14 and 33, the combination of Ottesen et al. and Monett teach all the limitations of Claims 1 and 21, respectively. However, the combination does not explicitly teach wherein a part of the data pattern is encoded using a 2T pattern and the filter is given by the function: $1 - D^2 + D^4 - D^6 + \text{etc.}$ However, this feature is well known in the art as disclosed by

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Zook, wherein it teaches that for the 2T pattern it uses a PR4 (which is $(1 + D)(1 - D) = 1 - D^2$, the transfer function above in its simplest form in Col. 13, Table 1). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Zook in order to filter the signal in order for the derived value to be close to the desired response as taught by Zook in Col. 6, Lines 16-23.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ottesen et al., Monett and Zook as applied to claim 13 above, and further in view of Muramatsu (US Patent No. 6, 381, 203). The combination of Ottesen et al., Monett and Zook teach all the limitations of Claim 13. However, the combination does not explicitly teach wherein a part of the data pattern is encoded using a 3T pattern and the filter is given by the function: $1 + D - D^3 - D^4 + D^6 + \text{etc.}$ Muramatsu wherein it teaches a 3T pattern that uses a transversal filter wherein it filter out the 3T signal (Pat. No. 6, 381, 203; Col. 1, Lines 57-66. It would have been obvious to a person of ordinary skill in the art to know that the filter would have that delay characteristic in order to extract the desired 3T sample.). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify the combination's invention with the teaching of Muramatsu to use a filter with those characteristics in order to extract the desired 3T signal.

11. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. in view of Park (US Patent No. 6, 208, 476). Ottesen et al. teach all the limitations of Claim 38. However, Ottesen et al. does not explicitly teach wherein providing a signal to a controller. Park teaches that as a result of a comparison, it sends a signal to a controller to whether there were errors detected in the signal in Col. 3, Line 64 to Col. 4, L 7. It would have been obvious to a

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person of ordinary skill in the art, at the time the invention was made, to modify Ottesen et al.'s invention with the teaching of Park in order to detect errors during the reproduction of the data (Pat. No. 5, 793, 548; Col. 4, Lines 3-7).

12. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. (US Patent No. 6, 288, 856) in view of Zook (US Patent No. 5, 793, 548). Ottesen et al. teach all the limitations of Claim 38. However, Ottesen et al. does not explicitly teach wherein a part of the data pattern is encoded using a 2T pattern and the filter is given by the function: $1 - D^2 + D^4 - D^6 \dots \pm D^{2n}$. Zook teaches that for the 2T pattern it uses a PR4 (which is $(1 + D)(1 - D) = 1 - D^2$, the transfer function above in its simplest form in Col. 13, Table 1). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ottesen et al.'s invention with the teaching of Zook to filter the signal in order for the derived value to be close to the desired response as taught by Zook in Col. 6, Lines 16-23.

13. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. (US Patent No. 6, 288, 856) in view of Muramatsu (US Patent No. 6, 381, 203). Ottesen et al. teach all the limitations of Claim 38. However, Ottesen et al. does not explicitly teach wherein a part of the data pattern is encoded using a 3T pattern and the filter is given by the function: $1 + D - D^3 - D^4 + D^6 + \text{etc.}$ Muramatsu teaches a 3T pattern that uses a transversal filter wherein it filter out the 3T signal in Col. 1, Lines 57-66 (It is obvious to a person of ordinary skill in the art to know that the filter would have that delay characteristic in order to extract the desired 3T sample). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ottesen et al.'s invention with the teaching of Muramatsu to use a filter with those characteristics in order to extract the desired 3T signal as taught by Muramatsu therein.

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14. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ottesen et al. (US Patent No. 6, 288, 856) in view of Cloke (US Patent No. 6, 411, 452). Ottesen et al. teach all the limitations of Claim 38. However, Ottesen et al. does not explicitly teach the use of a shift register. Cloke teaches using a summing circuit, a shift register and a comparator in Figs. 9A and 9C, wherein Cloke teaches the channel with the elements of a summing circuit, a shift register and a comparator for manipulation of bits sampled from the disk. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Ottesen et al.'s invention with the shift register taught by Cloke in order to synchronously detect the data as taught by Cloke in Col. 6, Lines 22-34.

Response to Arguments

15. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection due to the newly amended Claims.

16. Examiner acknowledges that Claim 20 has been cancelled in the Applicant's Amendment on 8/23/04.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 6, 292, 317 to Alexander.

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

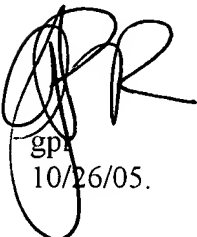
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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenda P. Rodriguez whose telephone number is (571) 272-7561. The examiner can normally be reached on Monday thru Thursday: 7:00-5:00; alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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10/26/05.



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SUPERVISORY PATENT EXAMINER
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